

Annual Report Information September 2012

Rutgers University – This is the 12th year for the Rutgers University QuarkNet Center. Rutgers personnel participating in the Center include faculty members (Eva Halkiadakis, Amit Lath and Steve Schnetzer) and staff member (Dave Meiullo). On August 12, we held a one-day workshop attended by ten teachers. The primary purpose of the workshop was to update teachers on the use of the QuarkNet Cosmic Ray Detector Kits and to exchange results and experiences. The other purpose of the workshop was to continue work on the RUCosmic Collaboration of New Jersey high schools to construct a large area cosmic ray detector array. This array will include as elements the paddles from the cosmic ray detector kits as well as large scintillating bar counters custom built for the array. A high point of this workshop was a presentation by Prof. Lath on the recent Higgs discovery at the LHC.

Over the coming year, we will continue our efforts and will work toward constructing a larger array 300 m x 300 m in extent with which we will be able to observe several showers per day of energy greater than 10^{16} eV. We are planning a follow up workshop in the spring to bring together the teachers and schools involved in this RUCosmic Collaboration. We are also planning to participate in a Masterclass event in the coming months.

Mentor: Steve Schnetzer